

Number: SB5X-90-13

Issued: 26 Apr 2022

SNS SUBJECT: 90-00 RECOVERY - CAPS Igniter Assembly

1. COMPLIANCE

Mandatory: Cirrus considers this Service Bulletin to be MANDATORY. Accomplish this Service Bulletin within 100 flight hours or annual inspection, whichever occurs first. Compliance time begins upon receipt of this Service Bulletin.

Note: Concurrent compliance with SB5X-90-12 or FRA00012649 is required.

Serials that have already complied with SB5X-90-12 or FRA00012649 will be required to comply again to remove and replace the CAPS cover.

WARNING: The Cirrus Airframe Parachute System can only be serviced by SF5X CAPS trained technicians at Cirrus Authorized Service Centers specifically approved for CAPS maintenance. Airframe and Powerplant license is not a sufficient credential for performing maintenance on CAPS.

2. EFFECTIVITY

SF50 Serials 0005 thru 0009, 0011 thru 0031

3. APPROVAL

FAA approval has been obtained on all technical data in this Service Bulletin that affects type design.

Aircraft not operating under FAA requirements and regulatory oversight: It is the operator's responsibility to ensure that installation of this Service Bulletin has been accepted by the local airworthiness authority.

4. PURPOSE

On the affected aircraft, Cirrus has been made aware of a possible condition associated with the Cirrus Airframe Parachute System (CAPS) electronic ignition system that may affect its operation. To correct this condition, the CAPS igniter assembly must be replaced.

5. DESCRIPTION

This Service Bulletin contains instructions to remove and install the CAPS igniter assembly.

6. WARRANTY INFORMATION

For aircraft under warranty, enrolled in JetStream Plus or JetStream Concierge at the issue date of this Service Bulletin, Cirrus will cover all parts and labor costs for this Service Bulletin if the work is accomplished within the compliance time period and the work is performed at a Cirrus Vision Jet Full Service Authorized Service Center.

7. MANPOWER REQUIREMENTS

45.0 man-hours

8. OTHER PUBLICATIONS AFFECTED

N/A

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9. WEIGHT AND BALANCE

N/A

10. MATERIAL INFORMATION

The following parts are required to comply with this Service Bulletin. Parts can be obtained from a Cirrus Vision Jet Full Service Authorized Service Center.

Order the following parts.

Item No.	Description	P/N or Spec.	Supplier	Quantity
1	CAPS Igniter Assembly	29556-002	Cirrus Aircraft	1
2	Screws	MS90728-5	Cirrus Aircraft	3

11. ACCOMPLISHMENT INSTRUCTIONS

A. Acquire necessary tools, equipment, and supplies.

Description	P/N or Spec.	Supplier	Purpose
Spanner Wrench	-	Any Source	Install CAPS igniter assembly.
Threadlocker	Loctite 242	Any Source	Install CAPS igniter assembly.
Torque Wrench Adapter, 3/4"	-	Any Source	Install CAPS igniter assembly.
Spanner Wrench Adapter	T11849	Cirrus	Install CAPS igniter assembly.
Threadlocker	Loctite 425	Any Source	Install CAPS rocket motor.

B. Remove CAPS rocket assembly. (Refer to CAPS CMM 90-00)

C. Remove rocket motor from CAPS rocket assembly.

- (1) Remove and discard screws securing rocket motor to rocket base.
- (2) Carefully slide rocket motor from launch tube.

WARNING: Wear nitrile gloves while handling the igniter as it is possible, but not likely, that slight residue of BKNO₃ dust may exist on the surface of the piccolo tube portion of the igniter.

Do not disassemble any portion of CAPS rocket igniter assembly.

D. Remove CAPS igniter assembly from rocket motor.

- (1) Using spanner wrench, rotate rocket igniter counter-clockwise from rocket motor.
- (2) Carefully slide rocket igniter from rocket motor.
- (3) Ensure igniter electrical wires are shunted to facilitate safe handling and transport.

E. Install new CAPS igniter assembly (item 1).

Note: Retain all internal and external packaging that was received from Cirrus with replacement igniter.

- (1) Place o-ring into groove at top of rocket motor case.
- (2) Apply Loctite 242 threadlocker to CAPS igniter assembly (item 1) threads.
- (3) Carefully slide CAPS igniter assembly (item 1) into rocket motor.
- (4) Using spanner wrench, rotate rocket igniter clockwise to rocket motor.
- (5) Using spanner wrench adapter, torque rocket igniter 25.0 to 30.0 ft-lb (33.9 to 40.7 Nm).

F. Install rocket motor to rocket base.

CAUTION: Verify o-ring is properly seated in launch tube base before seating rocket motor into launch tube.

- (1) Position bottom of rocket motor (nozzle end) to launch tube.
- (2) Carefully insert rocket motor into launch tube.
- (3) If frangible link hole on rocket motor case does not align with longer anchor block on launch tube, perform Inspection/Check - Rocket Motor Case Alignment. (Refer to CAPS CMM 90-00)
- (4) Apply Loctite 425 threadlocker to screws (item 2).

CAUTION: Do not cross thread or over-tighten screws.

- (5) Install screws (item 2) securing rocket base to rocket motor. Torque screws 3.00 ± 0.50 in-lb (0.34 ± 0.06 Nm).

G. Install CAPS rocket assembly. (Refer to CAPS CMM 90-00)

H. Return removed CAPS rocket igniter assembly to Cirrus.

CAUTION: Do not render the igniter inert (fired) prior to shipment. Doing so will negate any testing to be performed.

- (1) Complete inner pack requirements to ship igniter.
 - (a) Place igniter into pink anti-static sleeve.
 - (b) Place sleeve into cardboard tube.
- (2) Re-use UN 4G/4GV outer box from Cirrus and place tube containing igniter into outer box.
- (3) Seal packaging as specified by instructions on box.
- (4) Ensure orange 1.4G placard is intact (or replace as needed) and label as standard Hazmat shipment.
- (5) Ensure shipping documents provided to driver and attached to box include:
 - Vulcan Systems SDS for igniter (See attached copy)
 - Vulcan Systems DOT Competent Authority (See attached copy)
- (6) Ensure Competent Authority and UN Numbers referenced on your FedEx Hazmat declarations and labels are:
 - EX Number: EX-1998090143
 - UN Number: UN-0325: Igniters
- (7) Ensure net explosives weight for shipment is 0.1 lb (45.4 g).
- (8) Return shipment to:

ATTN: Director of Sustaining Engineering
Cirrus Aircraft
4515 Taylor Cir
Duluth, MN 55811

I. Complete airplane records by noting compliance with SB5X-90-13 in Aircraft Logbook.

To submit a Technical Publication change request, visit:

http://servicecenters.cirrusdesign.com/tech_pubs/SF50/serviceloopform.asp

or contact us by email at techpubs@cirrusaircraft.com.

